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Title	MELCOR Accident Consequence Code System (MACCS)
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Publication Date	1990 Feb 01
OSTI Identifier	OSTI ID: 7247757; TI90008262
Report Number(s)	NUREG/CR-4691-Vol.2;SAND--86-1562-Vol.2
DOE Contract Number	AC04-76DP00789
Resource Type	Technical Report
Resource Relation	DOE Project
Research Org	Nuclear Regulatory Commission, Washington, DC (USA). Div. of Systems Research; Sandia National Labs., Albuquerque, NM (USA)
Sponsoring Org	NRC
Subject	220900 -- Nuclear Reactor Technology-- Reactor Safety ;210100 -- Power Reactors, Nonbreeding, Light-Water Moderated, Boiling Water Cooled ;210200 -- Power Reactors, Nonbreeding, Light-Water Moderated, Nonboiling Water Cooled ;540130 -- Environment, Atmospheric-- Radioactive Materials Monitoring & Transport-- (1990-) ;540330 -- Environment, Aquatic-- Radioactive Materials Monitoring & Transport-- (1990-); BWR TYPE REACTORS-- REACTOR ACCIDENTS;NUCLEAR POWER PLANTS-- REACTOR ACCIDENTS;PWR TYPE REACTORS-- REACTOR ACCIDENTS;REACTOR ACCIDENTS-- COMPUTERIZED SIMULATION;REACTOR ACCIDENTS-- ENVIRONMENTAL EFFECTS; AGRICULTURE;AIR QUALITY;BIOCHEMISTRY;C CODES;DATA BASE MANAGEMENT;EARTH ATMOSPHERE;ECONOMICS;ENVIRONMENTAL EXPOSURE PATHWAY;FORTRAN;GAUSS FUNCTION;HEALTH HAZARDS;M CODES;PLANTS;RADIATION PROTECTION;RADIATION TRANSPORT;RADIOECOLOGICAL CONCENTRATION;RADIONUCLIDE MIGRATION;RISK ASSESSMENT;SAMPLING;STATISTICAL MODELS;U CODES;WATER CHEMISTRY;WATER QUALITY;WEATHER
Related Subject	ACCIDENTS;CHEMISTRY;COMPUTER CODES;ECOLOGICAL CONCENTRATION;ENVIRONMENTAL QUALITY;ENVIRONMENTAL TRANSPORT;FUNCTIONS;HAZARDS;INDUSTRY;MANAGEMENT;MASS TRANSFER;MATHEMATICAL MODELS;NUCLEAR FACILITIES;POWER PLANTS;PROGRAMMING LANGUAGES;REACTORS;SIMULATION;THERMAL POWER PLANTS;WATER COOLED REACTORS;WATER MODERATED REACTORS
Description/Abstract	This report describes the MACCS computer code.^The purpose of this code is to simulate the impact of severe accidents at nuclear power plants on the surrounding environment.^MACCS has been developed for the US Nuclear Regulatory

Commission to replace the previously used CRAC2 code, and it incorporates many improvements in modeling flexibility in comparison to CRAC2.^The principal phenomena considered in MACCS are atmospheric transport, mitigative actions based on dose projection, dose accumulation by a number of pathways including food and water ingestion, early and latent health effects, and economic costs.^The MACCS code can be used for a variety of applications.^These include (1) probabilistic risk assessment (PRA) of nuclear power plants and other nuclear facilities, (2) sensitivity studies to gain a better understanding of the parameters important to PRA, and (3) cost-benefit analysis.^This report is composed of three volumes.^Volume I, the User`s Guide, describes the input data requirements of the MACCS code and provides directions for its use as illustrated by three sample problems.^Volume II, the Model Description, describes the underlying models that are implemented in the code, and Volume III, the Programmer`s Reference Manual, describes the code`s structure and database management.^59 refs., 14 figs., 15 tabs.

Country of Publication	United States
Language	English
Format	Pages: (176 p)
Availability	NTIS, PC A09/MF A01 - GPO; OSTI; INIS
System Entry Date	2001 May 13